HH PPS Pricer Design (as of 5/16/00)

Input Data File:

The input record layout is attached. The file will be 450 bytes in length.

From Standard System: The following data elements will be passed to Pricer from the claim.

HHA-NPI	Provider Identifier (future claim item)
HHA-HIC	Health Insurance Claim Number
HHA-PROV-NO	Six-digit OSCAR provider number
HHA-TOB	Three-digit Type of Bill Code
HHA-SERV-FROM-DATE	From Date of Claim
HHA-SERV-THRU-DATE	Through Date of Claim
HHA-ADMIT-DATE	Admission Date of Claim
HHA-HRG-INPUT-CODE	Up to 6 instances.* First 6 HRGs (HIPPS codes) that appear on the claim

Calculated by Standard System: The following data will be calculated by the SS from the claim and passed to Pricer.

HHA-HRG-NO-OF-DAYS	Up to 6 instances.* The number of days of service applied to each HRG [span of days between the first service date and the last service date under each HRG]
HHA-MED-REVIEW-INDICATOR	Up to 6 instances. A Y/N indicator. An instance of this indicator will correspond with each HRG passed to Pricer. A Y indicator will be passed if the panel code field shows a HIPPS code and the line item pricing indicator on the claim shows the HIPPS code was changed in MR. A N indicator will be passed in all other cases.
HHA-INIT-PYMNT-INDICATOR	A one position indicator to show the percentage payment to made on initial claims to a specific provider. This value will be set by the intermediary in field 19 (Federal PPS Blend Indicator) of the provider specific file*** and copied by the Standard System into the Pricer input record. Valid values for 10/2000 will be:

> 0 = make normal initial payment
> 1 = pay 0%

Additional values may be added in subsequent years of HH PPS, to allow variable rates of payment.

HHA-REVENUE-DATA	Always six instances, representing each of the six HH disciplines. (H-HHA-REV-CODE will show rev. codes 42x,43x, 44x, 55x, 56x, and 57x in all cases. The revenue codes must be passed sorted in ascending order.) A count of occurrences** for each revenue code will be passed as HHA-COVERED-VISITS-QTY. If no occurences, pass zeroes.
HHA-PEP-INDICATOR	A Y/N indicator. A Y indicator will be passed if the patient status on the claim indicates a transfer (patient status 06) or a discharge w/goals met and return to the same agency (new patient status TBD). A N indicator will be passed in all other cases.
HHA-PEP-DAYS	The total number of days in a PEP episode period, calculated from the earliest line item date of service on the claim through the latest line item date of service. In typical PEPs, this number will match the HRG-NO-OF-DAYS. But in cases of SCICs within PEPs, the counts must be distinct.

* Pricer will only be able to price claims with 6 or fewer HRGs. RHHIs will establish a Medical Policy Parameter to suspend claims with more than 6 0023 lines for Medical Review. A special workaround process will be developed for the rare case where the seventh change is justified.
** In the course of a future annual update, HCFA may require increments, rather than visits, to be counted. In that case, a number calculated from the units field will replace the number of occurrences of the revenue code.
*** Section 3850 of the MIM must be revised to require intermediaries to maintain field 19 in addition to other currently required elements.

Decision Logic for Pricer:

If "HHA-TOB" = 322 or 332:

Find weight for "HHA-HRG-INPUT-CODE" from weight table. Multiply weight times Federal episode rate ($2115.29 in final rule), the product is the Federal adjusted rate. This rate must be wage-index adjusted according to labor and non-labor portions of the payment established by HCFA. Multiply the Federal adjusted rate by .77668 to determine the labor portion. Multiply the labor portion by the wage index corresponding to "HHA-MSA1" (Hospital wage index will be used). Multiply the Federal adjusted rate by .22332 to determine non-Labor portion. Add labor and non-labor portions. The sum is the wage index adjusted payment for this HRG.

If "HHA-INIT-PYMNT-INDICATOR" = 0, perform the following:

If "HHA-SERV-FROM-DATE" = "HHA-ADMIT-DATE": multiply payment by .6

(Note: SS editing to prevent providers from matching these elements on all claims has been determined to be impractical at the implementation of HH PPS. Provider abuse of this will be determined by data analysis and any education or enforcement done post-pay.)

Return resulting amount in "HHA-TOTAL-PAYMENT" field with return code 05.

If "HHA-SERV-FROM-DATE" does not = "HHA-ADMIT-DATE": multiply payment by .5

Return resulting amount in "HHA-TOTAL-PAYMENT" field with return code 04.

If "HHA-INIT-PYMNT-INDICATOR" = 1, perform the following:

Multiply payment by .00.

Return the resulting amount in "HHA-HRG-PAY" and "HHA-TOTAL-PAYMENT" fields with return code 03.

If "HHA-TOB" = 329, 339, 327, 337, 32G, 33G, 32I, 33I, 32J, 33J, 32M, or 33M:

Perform the following calculations in the numbered order:

1) Low Utilization Payment Adjustment (LUPA) calculation.

If "HHA-REVENUE-SUM1-6-QTY-ALL" (a total of the 6 revenue code quantities, representing the total number of visits on the claim) is less than 5:

Read national standard per visit rates from revenue code table for each of the six "HHA-REVENUE-QTY-COV-VISITS" fields. Multiply each quantity by the corresponding rate. Wage index adjust and sum the six products. The result is the total payment for the episode.

Return this amount in "HHA-TOTAL-PAYMENT" field with return code 06. No further calculations are required.

If "HHA-REVENUE-SUM1-6-QTY-ALL" is greater than or equal to 5: Proceed to therapy threshold determination.

2) Therapy threshold determination.

If "HHA-REVENUE-SUM1-3-QTY-THR" (a total of the quantities associated with therapy revenue codes, 42x, 43x, 44x, which will be passed from the SS sorted in this order) is less than 10: Read table of HRG codes.

If "HHA-MED-REVIEW-INDICATOR" is a Y for any HRG, do not perform the following determination for that HRG. Proceed to the next HRG occurrence.

If "HHA-MED-REVIEW-INDICATOR" is an N for any HRG, perform the following determination for that HRG:

If code in first HRG column matches the code in the second HRG column , use the weight for the HRG in the first HRG column for further calculations involving that HRG. Copy that code to the "HHA-HRG-OUTPUT-CODE" field.

If code in first HRG column does not match the code in the second HRG column, use the weight for the HRG in the second HRG column (which will always be a lower weight) for further calculations involving that HRG. Place the new code in the "HHA-HRG-OUTPUT-CODE" field.

If "HHA-REVENUE-SUM1-3-QTY-THR" is greater than or equal to 10: Copy all "HHA-HRG-INPUT-CODE" entries to the "HHA-HRG-OUTPUT-CODE" fields. Proceed to HRG payment calculations.

3) **HRG payment calculations**.

If "HHA-HRG-CODE" occurrences are less than 2, and "HHA-PEP-INDICATOR" is an N:

Find weight for "HHA-HRG-CODE" from weight table. Multiply weight times Federal episode rate ($2115.29 in final rule), this is the Federal Adjusted Rate. Multiply this adjusted rate by .77668 to determine labor portion. Multiply labor portion by wage index corresponding to "HHA-MSA1" (Hospital wage index will be used). Multiply adjusted rate by .22332 to determine non-Labor portion. Add labor and non-labor portions. This is the wage index adjusted payment for this HRG.

Proceed to 4) outlier calculation.

If "HHA-HRG-CODE" occurrences are less than 2, and "HHA-PEP-INDICATOR" is a Y:

Perform calculation of wage index adjusted payment for the HRG, as above. Determine fraction payable on this PEP by dividing "HHA-HRG-NO-OF-DAYS" amount by 60. Multiply wage index adjusted payment by this fraction. The result is the PEP payment due on the claim.

Proceed to 4) outlier calculation.

If "HHA-HRG-CODE" occurrences are greater than or equal to 2, and "HHA-PEP-INDICATOR" is an N:

> Multiply weight for "HHA-HRG-CODE -1" by value in "HHA-HRG-NO-OF-DAYS-1" over sixty. Multiply resulting weight by Federal episode rate. Repeat this for up to six occurrences of "HHA-HRG-CODE."   These amounts will returned separately in the "HHA-HRG-PAY" fields, so that the Standard System can associate them to the claim 0023 lines and pass the amounts to the remittance advice, making the payment more easily understood by the provider. Therefore each amount must be wage index adjusted separately.

> Sum all resulting dollar amounts. This is total HRG payment for the episode.

> Proceed to 4) outlier calculation.

If "HHA-HRG-CODE" occurrences are greater than or equal to 2, and "HHA-PEP-INDICATOR" is a Y:

> Determine the wage index adjusted payment for each HRG. Multiply this payment by the quantity in the "HHA-PEP -DAYS" field divided by 60. Multiply the result by the the quantity in the "HHA-HRG-NO-OF-DAYS" field divided by the quantity in the "HHA-PEP-DAYS" field. Repeat this for up to six occurrences of "HHA-HRG-CODE." These amounts will returned separately in the "HHA-HRG-PAY" fields.

> Sum all resulting dollar amounts. This is total HRG payment for the episode.

> Proceed to 4) outlier calculation.

4) Outlier calculation:

Wage index adjust the outlier threshold amount ($2284.51 in final rule), for labor and non-labor portions. Add the resulting adjusted threshold amount to the total dollar amount resulting from all HRG payment calculations. This is value A.

Read national standard per visit rates from revenue code table for each of the six "HHA-REVENUE-QTY-COV-VISITS" fields. Multiply each quantity by the corresponding rate. Sum the six results and wage index adjust this sum as described above, with labor and non-labor portions. The result is the adjusted cost for the episode, which is value B.

Subtract value A from value B.

If result is greater than $0.00:

Calculate .80 (this percentage may change again in the final rule) times the result.

Return this amount in "HHA-OUTLIER-PAYMENT" field. Add this amount to the total dollar amount resulting from all HRG payment calculations. This sum is the total payment for the episode.

Return the outlier and HRG payment amount(s), with return code 01.

If result is less than or equal to $0.00:

The total dollar amount resulting from all HRG payment calculations is the total payment for the episode.

Return zeroes in the "HHA-OUTLIER-PAYMENT" field. Return the HRG payment amount(s), with return code 00.

Pricer Outputs

HHA-HRG-OUTPUT-CODE	Occurs up to 6 times.The actual code that Pricer used to price the claim, after making therapy threshold determination
HHA-HRG-WGTS	The weight that corresponds to the HRG used to price the claim. This may be added to the paid claim record for use in audit.
HHA-HRG-PAY	Wage index adjusted payment made on each HRG
HHA-TOTAL-PAYMENT	Sum of all payments made on the claim (payments for each HRG plus outlier amount)
HHA-OUTLIER-PAYMENT	Applicable Outlier Payment
HHA-PAY-RTC	A set of two-digit return codes representing information on the type of payment being made or error messages describing reasons payment could not be calculated. Codes/needs determined so far:

00 =	Final payment, where no outlier applies
01 =	Final payment where outlier applies
03 =	Initial percentage payment, 0%
04 =	Initial percentage payment, 50%
05 =	Initial percentage payment, 60%
06 =	LUPA payment only
10 =	Invalid TOB
15=	Invalid PEP Days for shortened episode

20 =	PEP indicator invalid
25 =	Med review indicator invalid
30 =	Invalid MSA code
35 =	Invalid Initial Pymnt Indicator
40 =	Dates < Oct 1, 2000 or invalid
70 =	Invalid HRG code
75 =	No HRG present in 1st occurrence
80 =	Invalid revenue code
85 =	No revenue code present on 3x9 or adjustment TOB

Inputs in Annual Updates from HCFA:

Federal Episode Rate Amount $2,115.30 in final rule

Outlier Threshold Amount $2,390.29 in final rule, wage index adjusted
                                             (1.13 times the Federal episode rate amount)

Initial Claim Payment Percentage   60% for the first initial claim in stand alone
                                            episodes or first claim of multiple episodes of
                                            continuous care (i.e. claims where from and
                                            admision date match), then 50% for all inital
                                            claims thereafter (all other claims)

Outlier Loss Sharing Ratio (Percentage)   .80 loss sharing ratio in final rule

Labor and Non-Labor Percentages   .77668 and .22332 in final rule

Hospital Wage Index Table   MSA table published in the final rule

HRG(HIPPS) Code and Weight Table   Reformatted table from final rule of all HRGs,
                                            their weights and HRG low-therapy value

Revenue Code Rate Table   Table of home health discipline revenue codes
                                                and associated national standard pervisit
                                                rates from the final rule

INPUT RECORD TO PRICER FROM STANDARD SYSTEM—3x2 TOB

Elements completed on this record are passed to Pricer from the SS on each initial RAP. Footnoted elements are calculated items, with explanations below. All other items are moved to the Pricer input record as is from the claim record.

NPI		PIC X(10)
HIC	213849089A	PIC X(12)
PROV NO	475516	PIC X(06)
TYPE OF BILL	322	PIC XXX
PEP INDICATOR		PIC X
PEP DAYS		PIC 9(03)
INIT PYMNT INDICATOR	0	PIC X
FILLER		PIC X(07)
MSA	9945.00	PIC PIC 9(07)V9(02)
FILLER XXX		
MSA XXXX		
FILLER XX		
SERVICE FROM DATE	20001001	CCYYMMDD
SERVICE THRU DATE	20001001	CCYYMMDD
ADMIT DATE	20001001	CCYYMMDD

HRG DATA OCCURS 6 TIMES

HRG INPUT CODE	HBFM4	PIC X(05)
HRG OUTPUT CODE		PIC X (05)
NO-OF-DAYS	60[1]	PIC 9(03)
MED-REVIEW-IND	N[2]	PIC X
WGTS		PIC 9(06)
HRG PAY		PIC 9(07)V9(02)

REVENUE DATA OCCURS 6 TIMES

REVENUE CODE		PIC X(04)
QTY-COV-VISITS		PIC 9(03)
REVENUE DOLLAR RATE		PIC 9(07)V9(02)
REVENUE COST		PIC 9(07)V9(02)

RETURN CODE		PIC 99
REVENUE QTY SUM 1-3-THR		PIC 9(05)
REVENUE QTY SUM 1-6-ALL		PIC 9(05)
OUTLIER PAYMENT		PIC 9(07)V9(02)
TOTAL PAYMENT		PIC 9(02)V9(02)
FILLER		PIC X(20)

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[1] HRG number of days is calculated by determining the number of days between the claim from date and the last service date provided under an HRG for the first occurrence, and by determining the inclusive span of days between the first and last service date for all subsequent occurrences. Initial RAPs will plug 60 days, as this count is not yet available.

[2] Med Review indicator is set to a Y if a HIPPS code is in the panel field and the line item pricing indicator on a 0023 line indicates the line was re-coded by MR.

INPUT RECORD TO PRICER FROM STANDARD SYSTEM—3x9 TOB

Elements completed on this record are passed to Pricer from the SS on each final claim. Footnoted elements are calculated items, with explanations below. All other items are moved to the Pricer input record as is from the claim record.

NPI		PIC X(10)
HIC	213849089A	PIC X(12)
PROV NO	475516	PIC X(06)
TYPE OF BILL	329	PIC XXX
PEP INDICATOR	Y[3]	PIC X
PEP DAYS	25	PIC 9(03)
INIT PYMNT INDICATOR		PIC X
FILLER		PIC X(07)
MSA	9945.00	PIC PIC 9(07)V9(02)
FILLER XXX		
MSA XXXX		
FILLER XX		
SERVICE FROM DATE	20001001	CCYYMMDD
SERVICE THRU DATE	20001030	CCYYMMDD
ADMIT DATE	20001001	CCYYMMDD

HRG DATA OCCURS 6 TIMES

HRG INPUT CODE	HBFM4	PIC X(05)
HRG OUTPUT CODE		PIC X (05)
NO-OF-DAYS	25[4]	PIC 9(03)
MED-REVIEW-IND	N[5]	PIC X
WGTS		PIC 9(06)
HRG PAY		PIC 9(07)V9(02)

REVENUE DATA OCCURS 6 TIMES

REVENUE CODE	0420	PIC X(04)
QTY-COV-VISITS	3	PIC 9(03)
REVENUE DOLLAR RATE		PIC 9(07)V9(02)
REVENUE COST		PIC 9(07)V9(02)

RETURN CODE		PIC 99
REVENUE QTY SUM 1-3-THR		PIC 9(05)
REVENUE QTY SUM 1-6-ALL		PIC 9(05)

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[3] PEP indicator is set to a Y if patient status on the claim record is 06 or new patient status for discharge and readmission within 60 days. PEP days calculated by determining the number of days between the claim from date and the last service date provided in the episode.

[4] HRG number of days is calculated by determining the number of days between the claim from date and the last service date provided under an HRG for the first occurrence, and by determining the inclusive span of days between the first and last service date for all subsequent occurrences.

[5] Med Review indicator is set to a Y if a HIPPS code is in the panel field and the line item pricing indicator on a 0023 line indicates the line was re-coded by MR.

OUTLIER PAYMENT	_____	PIC 9(07)V9(02)
TOTAL PAYMENT	_____	PIC 9(02)V9(02)
FILLER		PIC X(20)

OUTPUT RECORD FROM PRICER TO STANDARD SYSTEM—3x2 TOB

Elements completed on this record are passed back from Pricer to the SS after an initial RAP is priced. **This display shows only the elements that will generated by the Pricer. Input items will also be returned, but are not displayed here.**

NPI   PIC X(10)
HIC   PIC X(12)
PROV NO   PIC X(06)
TYPE OF BILL   PIC XXX
PEP INDICATOR   PIC X
PEP DAYS   PIC 9(03)
INIT PYMNT INDICATOR   PIC X
FILLER   PIC X(07)
MSA   PIC PIC 9(07)V9(02)
    FILLER XXX
    MSA XXXX
    FILLER XX
SERVICE FROM DATE   CCYYMMDD
SERVICE THRU DATE   CCYYMMDD
ADMIT DATE   CCYYMMDD

HRG DATA OCCURS 6 TIMES
    HRG INPUT CODE   PIC X(05)
    HRG OUTPUT CODE   HBFM4[6]   PIC X (05)
    NO-OF-DAYS   PIC 9(03)
    MED-REVIEW-IND   PIC X
    WGTS   018215[7]   PIC 9(06)
    HRG PAY   0002256.09   PIC 9(07)V9(02)

REVENUE DATA OCCURS 6 TIMES
    REVENUE CODE   PIC X(04)
    QTY-COV-VISITS   PIC 9(03)
    REVENUE DOLLAR RATE   PIC 9(07)V9(02)
    REVENUE COST   PIC 9(07)V9(02)
RETURN CODE   04   PIC 99
REVENUE QTY SUM 1-3-THR   PIC 9(05)
REVENUE QTY SUM 1-6-ALL   PIC 9(05)
OUTLIER PAYMENT   PIC 9(07)V9(02)
TOTAL PAYMENT   0001570.35   PIC 9(02)V9(02)
FILLER   PIC X(20)

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[6] If the claim is downcoded because it does not meet the therapy threshold, this code will be different from the input code. In all other circumstances, the input code will be copied to this field.
[7] The weight used in the calculation will be returned and placed on a separate page of the claim record, but will not be used for any further calculation in the SS.

OUTPUT RECORD FROM PRICER TO STANDARD SYSTEM—3x9 TOB

Elements completed on this record are passed back from Pricer to the SS after a final claim is priced. **This display shows only the elements that will generated by the Pricer. Input items will also be returned, but are not displayed here.**

NPI		PIC X(10)
HIC		PIC X(12)
PROV NO		PIC X(06)
TYPE OF BILL		PIC XXX
PEP INDICATOR		PIC X
PEP DAYS		PIC 9(03)
INIT PYMNT INDICATOR		PIC X
FILLER		PIC X(07)
MSA		PIC PIC 9(07)V9(02)

     FILLER XXX
     MSA XXXX
     FILLER XX

SERVICE FROM DATE		CCYYMMDD
SERVICE THRU DATE		CCYYMMDD
ADMIT DATE		CCYYMMDD

HRG DATA OCCURS 6 TIMES

HRG INPUT CODE		PIC X(05)
HRG OUTPUT CODE	HBFK4[8]	PIC X (05)
NO-OF-DAYS		PIC 9(03)
MED-REVIEW-IND		PIC X
WGTS	007709[9]	PIC 9(06)
HRG PAY	0001570.35	PIC 9(07)V9(02)

REVENUE DATA OCCURS 6 TIMES

REVENUE CODE		PIC X(04)
QTY-COV-VISITS		PIC 9(03)
REVENUE DOLLAR RATE	0000083.39[10]	PIC 9(07)V9(02)
REVENUE COST	000250.17	PIC 9(07)V9(02)

RETURN CODE	00	PIC 99
REVENUE QTY SUM 1-3-THR	00003	PIC 9(05)
REVENUE QTY SUM 1-6-ALL	00020	PIC 9(05)
OUTLIER PAYMENT	0000000.00	PIC 9(07)V9(02)

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[8] If the claim is downcoded because it does not meet the therapy threshold, this code will be different from the input code. In all other circumstances, the input code will be copied to this field.
[9] The weight used in the calculation will be returned and placed on a separate page of the claim record, but will not be used for any further calculation in the SS.
[10] The rate used in the calculation will be returned and placed on a separate page of the claim record, but will not be used for any further calculation in the SS.

TOTAL PAYMENT   <u>0001570.35</u>   PIC 9(02)V9(02)

FILLER   PIC X(20)